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February 22, 2012

VIA E-MAIL

Evan L. Pearson
Senior Enforcement Counsel (6RC-ER)
RCRA Enforcement Branch
Office of Regional Counsel
U. S. Environmental Protection Agency, Region 6
1445 Ross Avenue
Dallas, TX 75202-2733

Re: U.S. Ecology, Inc.
TD*X Associates

Dear Evan:

This letter follows up on certain issues discussed at the February 14, 2012 meeting between U. S. Ecology, TD*X Associates, and EPA concerning the permitting status of the thermal desorption unit ("TDU") under RCRA. You indicated at that meeting that because the process vent gases from the oil reclamation process are routed to the TDU, the TDU is an incinerator which requires a RCRA permit. However, as we pointed out in the meeting, this contention is incorrect because the process vent gases are not "solid wastes" subject to RCRA jurisdiction.

The term "solid waste" is defined in RCRA as any "solid, semi-solid, liquid, or *contained gaseous material.*" 42 U.S.C. § 6903(27) (West 2011) (emphasis added). The process vent gases originating at the TDU are uncontained gases; therefore, these gases are not regulated under RCRA because they are not solid waste subject to RCRA jurisdiction, permitting or otherwise. At our meeting we provided EPA with a copy of a document from the Office of Management and Budget ("OMB") reciting the longstanding EPA precedent that uncontained gas is not a solid waste. Another copy of this document is attached to this letter as Attachment "A." Among the precedent cited in this document is an EPA guidance document entitled "Hazardous Waste TSDF-Technical Guidance Document for RCRA Air Emission Standards for Process Vent and Equipment Leaks." Although relevant excerpts from this EPA guidance document were also provided to you at our meeting, another copy is attached to this letter as Attachment "B." We would draw your specific attention to the Note on pages 2-3, which directly addresses the regulatory status of process vent streams under RCRA, and states that "[n]containerized gases emitted from hazardous wastes are not themselves hazardous wastes because the RCRA statute implicitly excludes them." *See* also McCoy's RCRA Unraveled

(2009), § 14.5.3.1 (" . . . vent streams (i.e. gases and vapors) from hazardous waste management units are not classified as solid or hazardous wastes.")

As we discussed in our meeting, the definition of solid waste as including only "contained gaseous material," and not uncontained gases like the TDU's process vent stream, defines the jurisdictional boundaries between RCRA and the federal Clean Air Act. This precise point was made in a training document prepared for The Advanced RCRA Inspector's Institute discussing the "RCRA/Clean Air Act Interface," relevant excerpts of which are attached as Attachment "C." Prepared for the express purpose of training RCRA inspectors to conduct proper RCRA inspections, this document acknowledges that uncontained gases are not solid waste. Specifically, in discussing the regulatory status of organics in activated carbon units, it provides that "[t]rapped organics in such columns are not hazardous waste because the gas being treated is not a solid waste (it is an uncontained gas), and therefore any condensed organics do not derive from treatment of a hazardous waste."

The conclusion that uncontained gases are outside the scope of RCRA was articulated by EPA Headquarters as recently as May 13, 2011, in a letter from Suzanne Rudzinski, Director, Office of Resource Conservation and Recovery, EPA, to Tim Hunt, Senior Director Air Quality, American Forest and Paper Association. A copy of this letter is attached as Attachment "D." That letter recites:

> The response does not change any previous EPA positions. We clarify here that the Agency's previous statements and interpretations remain effective. Thus, burning of gaseous material, such as in fume incinerators (*as well as other combustion units*, including air pollution control devices that may combust gaseous material) does not involve treatment of other management of a solid waste (as defined in RCRA section 1004 (27))(emphasis added).

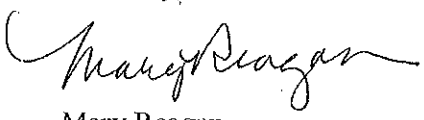
The letter which you relied on in our meeting (OSWER 9489.1994(01)) for EPA's position that the TDU is a RCRA-regulated incinerator is not on point. That letter concerns a general discussion of the regulatory status of thermal treatment units and whether chlordane contaminated soil can be effectively and safely treated by thermal desorption. The unit referred to in the letter appears to be a hazardous waste treatment unit that is not operating under any RCRA exclusions or exemptions. The chlordane hazardous waste treatment requires a RCRA permit to treat the soil in the desorber unit without regard to how the vent gases from the unit are managed. The letter attempts to distinguish which provision under RCRA the unit should be permitted based on how the desorbed organic compounds are managed. The letter does not address whether the desorbed organics from the process are "uncontained gases," which is the premise of U.S. Ecology's position that uncontained gases are not regulated under RCRA. We do not disagree with the premise that the chlordane treatment unit described in the letter requires a RCRA permit. However, we continue to disagree that that a RCRA permit is required for the sole purpose of ducting uncontained vent gases to the combustion zone of the TDU. (It should also be noted that this letter is inconsistent on other grounds with your position that the TDU is

an incinerator. It states that desorption chambers with indirect heating are miscellaneous units, not incinerators.) A copy of this letter is attached as Attachment "E."

EPA's assertion that process vent gases from the TDU are solid waste because they are "derived from" the treatment of solid waste is equally invalid. Under the express terms of the "derived from" rule, materials must first be wastes before they can be RCRA-regulated because they are derived from the treatment, storage, and disposal of solid waste. *See* 40 CFR § 261.3 (c)(2)(i) ("[A]ny *solid waste* generated from the treatment, storage, or disposal of a hazardous waste . . . is a hazardous waste" (emphasis added)). As the foregoing EPA precedent unmistakably shows, the process vent gases are not solid wastes covered by the "derived from" rule. This point was specifically made in the training document provided in Attachment "C" to this letter in its conclusion that because the gas from activated carbon units was not solid waste, "any condensed organics do not derive from treatment of a hazardous waste."

In summary, the process vent gases produced at the TDU are not solid wastes; therefore, EPA lacks RCRA jurisdiction to assert that the introduction of these gases to the TDU is a waste management activity subject to permitting or enforcement under RCRA.

Sincerely,



Mary Reagan

MBR/rrh
Attachments

ATTACHMENT "A"

EPA's Prior Determinations That Landfill Gas is Not a Solid Waste

- Since 1986, EPA has determined under RCRA that landfill gas would be regulated as an "air pollutant", rather than as "solid waste" In that regard, the regulation of MSW landfill emissions was considered during deliberations under a RCRA subtitle D rulemaking. In 1986 and 1987 the Administrator decided to regulate these emissions under the authority of the Clean Air Act. See, e.g. March 6, 1986 Memorandum from Marcia Williams to H. Lanier Hickman, Jr. (attached), cited in Definition of Solid Waste Compendium, Volume U, (Un)-Contained Gases (December 2010)(attached) (see particularly page 9, which refers to the Hickman memorandum and which characterizes landfill gas as "uncontained" and therefore not "solid waste"). After further consideration, the EPA announced in the Federal Register on August 30, 1988 (53 Fed. Reg. 33,314) (attached) their decision to regulate MSW landfill emissions under section 111 of the CAA. This ultimately occurred through the promulgation of the landfill NSPS, 40 CFR Part 60, Subparts WWW and Cc in 1996.

- In the proposed Landfill NSPS standards published on May 30, 1991 (56 Fed. Reg. 24,468) (attached), EPA again reiterated its decision to treat landfill gas as a Clean Air Act pollutant (rather than as solid waste).

- The issue was re-raised during public comment for the proposed NSPS. In response, EPA specifically stated in response: "the RCRA subtitle D establishes a framework for controlling the management of nonhazardous solid waste. Because the intent of this rule is to regulate emissions of landfill gas, and not solid waste, this regulation has been developed under the CAA instead of under RCRA. Some requirements in the RCRA subtitle D regulation are referenced within the NSPS and EG and are necessary to achieve compliance with these regulations." See Air Emissions From Municipal Solid Waste Landfills – Background Information for Final Standards and Guidelines, EPA-453/R-94-021 (December 1995), at pages 1-4, 2-31 to 2-34 (attached). Thus, the concept of utilizing RCRA authority and regulating landfill gas as solid waste was specifically rejected by EPA at that time. "Although one commenter suggested that LFG emissions should be regulated under RCRA authority, the EPA continues to consider Section 111 NSPS and EG to be the appropriate statutory approach for regulating these emissions because the adverse health and welfare effects of concern result from air emissions. Therefore, the final notice added MSW landfills as a source category for regulation under Section111(b)(1)(A) of the CAA to the priority list in 40 CFR 60.16." See id.

- On January 16, 2003, EPA issued National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills (68 Fed. Reg. 2,227), which ensured that landfill gas collection and treatment and/or control systems (including combustion units and landfill gas used on or offsite in beneficial use projects) achieved MACT level controls.

- EPA again noted on March 22, 2004, in revisions to its Criteria for Municipal Solid Waste Landfills, Final Rule for Research, Development and Demonstration Permits for Municipal Solid Waste Landfills:

"With the exception of explosive gas control requirements, landfill gas controls are not regulated pursuant to Subtitle D of RCRA: rather landfill gas emissions are regulated under the Clean Air Act (CAA). The air criteria in 40 CFR 258.24 refer to CAA requirements by requiring compliance with the applicable State Implementation Plan provisions under section 110 of the CAA. Specific requirements pertaining to landfill gas emissions from MSWLF units are addressed in 40 CFR Part 60,Subparts Cc and WWW. Recently, EPA promulgated National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills (68 FR 2227, Jan. 16, 2003). This rule includes requirements for initiating landfill gas collection and control in bioreactor landfills. See 40 CFR Part 63, Subpart AAAA.... [C]onsistent with section 1006(b) of RCRA, EPA sees no need for additional requirements under RCRA to address air emissions in today's rule."

See Final Rule, Research, Development and Demonstration Permits for Municipal Solid Waste Landfills, 69 Fed. Reg. 13,242 (2004) (attached).

- Thus, by 2004, all landfills regulated under WWW were regulated under the Section 112 Landfill MACT standards promulgated at 40 CFR Part 63, Subpart AAAA. In all instances, the notion was that landfill gas would be combusted either in open flares, enclosed combustors (enclosed flares, turbines, engines or boilers), or the gas would be treated (compressed, filtered to 10 microns or less, and cooled or chilled) and routed for use as fuel as either onsite or offsite. When combusted in turbines, engines or boilers, the landfill gas is either controlled to NSPS-specified treatment limits, or it is "treated" as per the NSPS for end use.

- Having exercised its asserted authority under RCRA Section 4004 to regulate air emissions from landfills as a "designated air pollutant" under the Clean Air Act rather than as solid waste under RCRA, the combustion of this designated air pollutant in a flare, turbine, boiler or engine should not be deemed to be the combustion of a solid waste. Stated differently, something cannot be a designated air pollutant and a solid waste at the same time.

- For purposes of Section 129, the term "solid waste' has the meaning established by the Administrator pursuant to the Solid Waste Disposal Act. The meaning established for many years by the Administrator pursuant to the Solid Waste Disposal Act (RCRA) was that landfill gas would not be treated as solid waste, and its combustion would not be treated as solid waste combustion, but rather, as an uncontained gaseous emission regulated as a designated air pollutant by the Clean Air Act. There is nothing in the Non-Hazardous Secondary Materials Rule (NHSM) that establishes that landfill gas is a solid waste, and the regulatory impact analysis for the CISWI rule gave no consideration of landfill gas as a source type for establishment of MACT. Indeed, the NHSM establishes that solid waste follows the meaning of solid waste for purposes of Subtitle D, 40 CFR 258.2. That definition excludes uncontained gas from the definition of solid waste, and has via rulemaking always excluded landfill gas.

Longstanding EPA Precedent that Uncontained Gas is not a Solid Waste

- The statutory definition of "solid waste" includes "contained gaseous material." 42 USC § 6903(27).

- EPA interpretation of the term "contained gaseous material" demonstrates that RCRA only applies to "contained" gases, to the exclusion of "uncontained" gases.

- EPA's interpretation of "contained" has been limited to gas present inside "containers."

    - In a 1989 preamble to a final rule dealing with the listing of certain hazardous substances under RCRA, EPA stated that EPA "believes our authority to identify or list a waste as hazardous under RCRA is limited to *containerized* or condensed gases (i.e., section 1004(27) of RCRA excludes all other gases from the definition of solid wastes and thus cannot be considered hazardous wastes). *See* Hazardous Waste Management System: Identification and Listing of Hazardous Waste, 54 Fed. Reg. 50968, 50973 (Dec. 11, 1989).

    - The CISWI Rule promulgated in 2000 defined contained gaseous material as limited to "gases that are in a container when that container is combusted." (EPA provided no explanation for deletion of this definition, which was not mandated or even discussed in the D.C. Circuit's *NRDC* decision.)

    - Similarly, 40 CFR Part 60, Subpart EEEE, governing Other Solid Waste Incineration Units, includes the same definition of "contained gaseous material."

- EPA has a longstanding policy providing that fume incinerators are subject to regulation only under the CAA, and not also RCRA.

    - For example, in the preamble to a 1982 dealing with regulation of incinerators that burn hazardous waste, EPA stated that "fume incinerators are subject only to regulation under the Clean Air Act . . . . Fume incinerators which are used to destroy gaseous emissions from various industrial processes, for example, are not subject to regulation under RCRA. In general, the RCRA standards do not apply to fume incinerators since the input is not identifiable as a solid waste." See The Hazardous Waste Management System, Interim Final Amendments to Interim Final and Final Rules, 47 Fed. Reg. 27,520, 27,530 (June 24, 1982). See also, RCRA Superfund Hotline Monthly Summary, 9488.1986(03) available at RCRA Online.

    - EPA has reaffirmed this position on subsequent occasions. For example, in the 1989 preamble discussed above, EPA stated that "fume incinerators are installed as air pollution control devices pursuant to regulations under the Clean Air Act; they are used to destroy gaseous emissions from various industrial processes. EPA concluded that, in general, RCRA standards do not apply to fume incinerators because the input (an uncontainerized gas) is not a solid waste." 54

Fed. Reg. 50,973 n.5. See also, Memorandum from Matthew Straus, Chief, Waste Characterization Branch, to Clifford Ng, Engineer, EPA Region II, dated June 17, 1987, available at RCRA Online ("Methanol-laden air from the drying and granulation step of the process does not meet the definition of solid waste under RCRA because it is in vapor form and not confined in a container.")

- On a few occasions, some in EPA attempted to take a broader view of contained gas (e.g. piping was enough) but that view was rejected by the courts or the administrative tribunal. See, e.g. In re BP Chemicals America, Inc., RCRA Appeal No. 89-4, 1991 EPA App. LEXIS 27; 3 E.A.D. 667 (EPA Admin., Aug. 20, 1991) (The Administrator specifically rejected Region V's argument that gaseous emissions were "contained" by the process units they passed through, associated piping or the facility itself, holding that the Agency's definition of the term "contained" has consistently been confined "in the narrower sense of being in an individual container such that the gas is amenable to shipment"). See also In re: Chemical Waste Management of Indiana, Inc., RCRA Appeal No. 95-4, *1995 EPA App. LEXIS 31*(EPA Environmental Appeals Board, Aug. 23, 1995) (emissions from microencapsulation of hazardous debris) (The EAB concludes the air emissions are excludable from Subtitle C regulation "because the air emissions that the Region seeks to regulate are not containerized.")

- In the landfill gas context, that view was similarly rejected by stakeholder groups assigned to review combustion issues. See, e.g., Recommendation from the Incinerator Workgroup on Section 112 Subcategories April 28, 1998 ("Section 129 Requirements. Section 129 applies to "solid waste combustion." Because solid waste is defined to exclude gases (except gases which are in containers), Section 129 does not apply to landfill gas flares.") (available at http://www.epa.gov/ttn/atw/iccr/incin/rec-112.pdf).

- The final Boiler MACT rule expressly recognizes that landfill gas constitutes a "gaseous *fuel*." (76 Fed. Reg. 15,684)

- See also:

    - Burning of Hazardous Waste in Boilers and Industrial Furnaces, Final Rule, 56 Fed. Reg. 7134, 7200 (Feb. 21, 1991) (activated carbon units used as air emission control devises are not subject to RCRA because "the gas originally treated is not a solid waste (it is an uncontained gas)." See also RCRA Online Determinations 12783 (November 20, 1986) (Volatile organics released to the air are not hazardous waste because they are not solid wastes. (They do not fit the definition established in §1004(27) of RCRA as "contained gaseous materials.")"

    - Hazardous Waste TSDF - Technical Guidance RCRA Air Emission Standards for Process Vents and Equipment Leaks, EPA-450/3-89-021 (July 1990) at pages 2-3: "Air standards have been promulgated for the control of air emissions from permitted hazardous waste incinerators. 40 CFR Part 264, Subpart O. These standards require that incinerators burning hazardous waste be operated to achieve a destruction and removal efficiency (DRE) of at least 99.99 percent for those

primary organic hazardous constituents listed in the facility permit However, the process vent stream (i.e. gases and vapors) from a hazardous waste management unit would not be classified as a hazardous wastes. Noncontainerized gases emitted from hazardous wastes are not themselves hazardous wastes because the RCRA statute implicitly excludes them. Therefore combustion of process vent streams in an incinerator is not subject to the 99.99 DRE requirement."

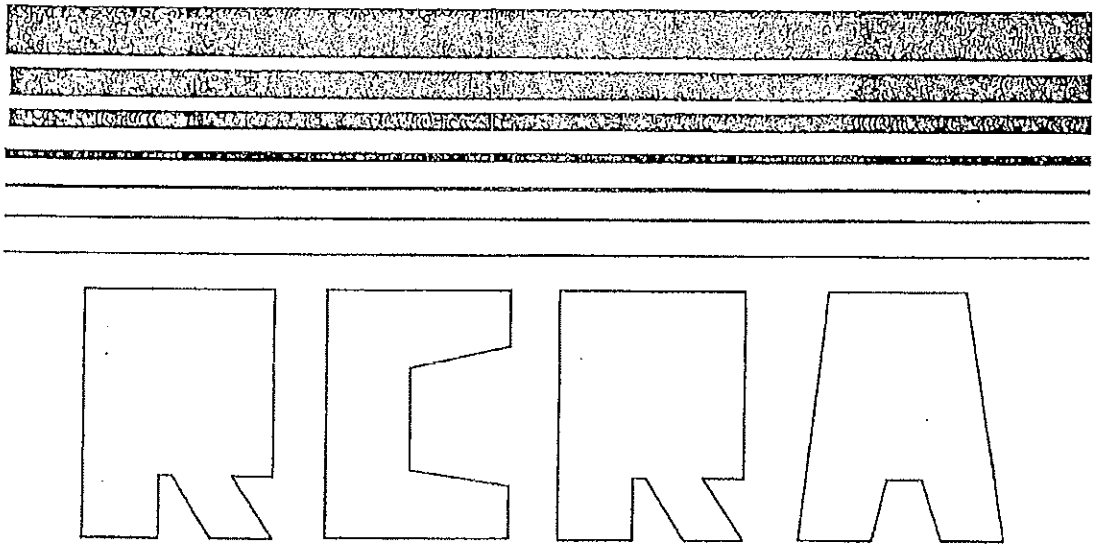
- Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF): Background Information for Promulgated Organic Air Organic Air Emission Standards for Tanks, Surface Impoundments, and Containers, EPA/453/R-94/076b (November 1994) (since organic vapors emitted from hazardous waste are not solid or hazardous waste, control devices installed to comply with Subpart CC organic vapor control requirements are not hazardous waste management units and do not require RCRA permits).

ATTACHMENT "B"

United States Environmental Protection Agency
Office of Air Quality Planning and Standards Research Triangle Park NC 27711
EPA-450/3-89-021 July 1990
Air

EPA

Hazardous Waste TSDF - Technical Guidance Document for RCRA Air Emission Standards for Process Vents and Equipment Leaks



The standards for process vents contain requirements that specific control device operating parameters be monitored continuously (Sections 264.1034 and 265.1034) and the monitoring information be recorded in the facility operating record to ensure that the devices perform according to their design and are properly operated and maintained. Operating parameters are specified for condensers, carbon adsorbers, flares, incinerators, and other enclosed combustion devices. While minimum operating conditions are identified for organic vapor destruction devices (e.g., incinerators and flares) to ensure 95 percent destruction, values or ranges of values for recovery device (i.e., condensers and carbon adsorbers) operating parameters cannot be specified on an industry-wide basis. A recovery device must be designed for a particular application and monitored to ensure that it is being operated within design specifications. (Note: This is an important point for permit writers/reviewers to keep in mind when evaluating control device efficiencies.) Proper design shall be determined through and documented by engineering calculations, vendor certification, and/or emission testing, although the use of emission testing to determine compliance with efficiency requirements is expected to occur only rarely. For facilities with final RCRA permits, periods when monitoring data indicate that control device operating parameters exceed established tolerances for design specifications for more than 24 hours must be reported on a semiannual basis. The records and reports must include dates, duration, cause, and corrective measures taken. (Note: Air standards also have been promulgated for the control of air emissions from permitted hazardous waste incinerators (40 CFR 264, Subpart O). These standards require that incinerators burning hazardous waste be operated to achieve a destruction and removal efficiency (DRE) of at least 99.99 percent for those primary organic hazardous constituents listed in the facility permit. However, the process vent stream (i.e., gases and vapors) from a hazardous waste management unit would not be classified as a hazardous waste. Noncontainerized gases emitted from hazardous wastes are not themselves hazardous wastes because the RCRA statute implicitly excludes them. Therefore, combustion of process vent streams in an incinerator is not subject to the 99.99 DRE requirement.)

ATTACHMENT "C"

EPA United States Environmental Protection Agency

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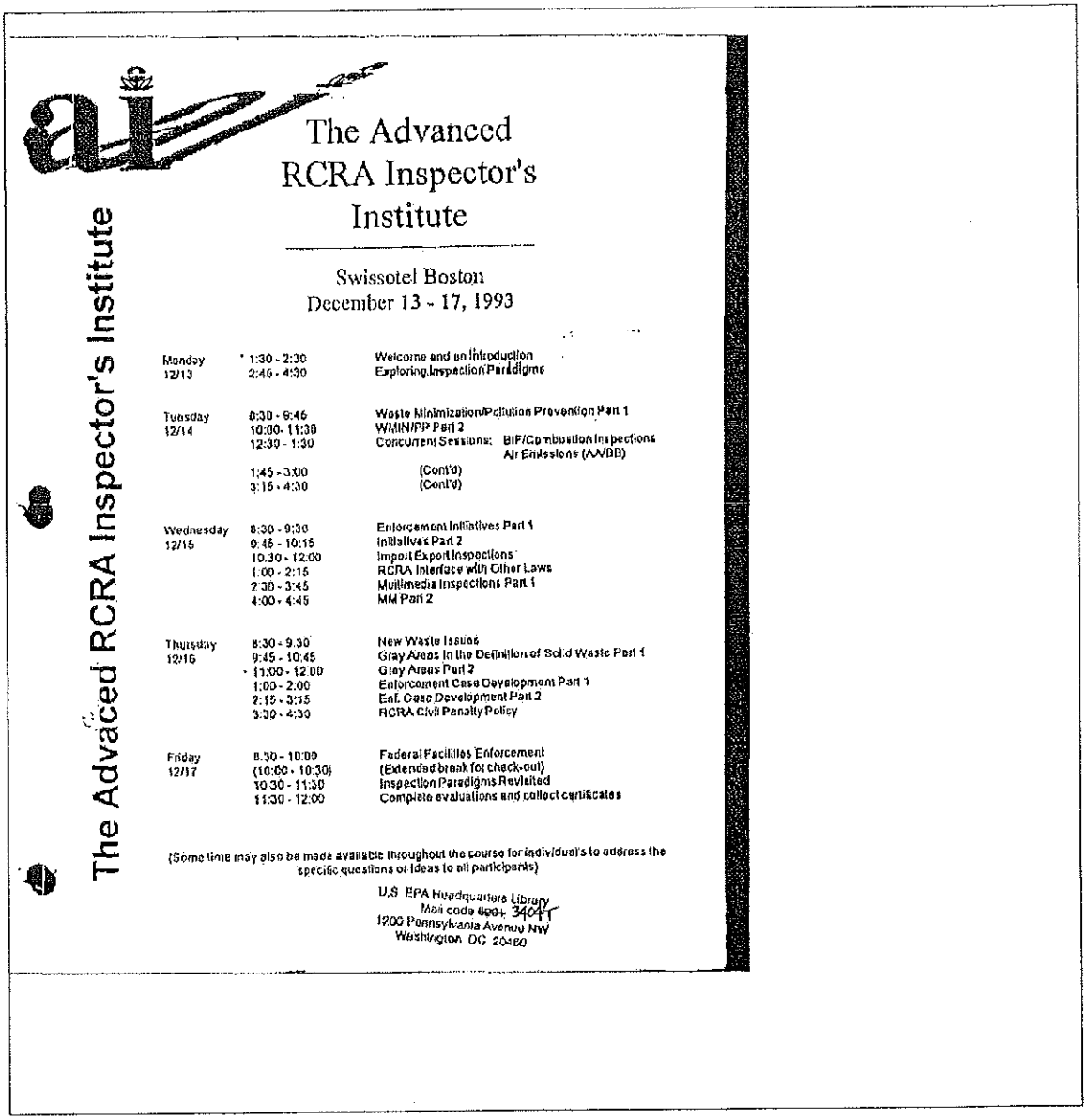

The Advanced RCRA Inspector's Institute

The Advanced RCRA Inspector's Institute

Swissotel Boston
December 13 - 17, 1993

Monday 12/13	1:30 - 2:30	Welcome and an Introduction
	2:45 - 4:30	Exploring Inspection Paradigms
Tuesday 12/14	8:30 - 9:45	Waste Minimization/Pollution Prevention Part 1
	10:00 - 11:30	WMIN/PP Part 2
	12:30 - 1:30	Concurrent Sessions: BIF/Combustion Inspections
		Air Emissions (AA/BB)
	1:45 - 3:00	(Cont'd)
	3:15 - 4:30	(Cont'd)
Wednesday 12/15	8:30 - 9:30	Enforcement Initiatives Part 1
	9:45 - 10:15	Initiatives Part 2
	10:30 - 12:00	Import Export Inspections
	1:00 - 2:15	RCRA Interface with Other Laws
	2:30 - 3:45	Multimedia Inspections Part 1
	4:00 - 4:45	MM Part 2
Thursday 12/16	8:30 - 9:30	New Waste Issues
	9:45 - 10:45	Gray Areas in the Definition of Solid Waste Part 1
	11:00 - 12:00	Gray Areas Part 2
	1:00 - 2:00	Enforcement Case Development Part 1
	2:15 - 3:15	Enf. Case Development Part 2
	3:30 - 4:30	RCRA Civil Penalty Policy
Friday 12/17	8:30 - 10:00	Federal Facilities Enforcement
	(10:00 - 10:30)	(Extended break for check-out)
	10:30 - 11:30	Inspection Paradigms Revisited
	11:30 - 12:00	Complete evaluations and collect certificates

(Some time may also be made available throughout the course for individuals to address the specific questions or ideas to all participants)

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United States Environmental Protection Agency | Office of Solid Waste and Emergency Response | November 1992

EPA

RCRA/Clean Air Act Interface

A Quick Reference Fact Sheet

Background

RCRA and the Clean Air Act (CAA) both have regulatory programs to address emissions onto the environment. The CAA comprises a series of interlocking programs designed to protect health and the public welfare from emissions polluting the ambient (outdoor) air.

The 1990 amendments to CAA contain several innovative approaches to air regulation. The Act is subdivided into a number of titles including provisions for attainment and maintenance of National Ambient Air Quality Standards (NAAQS), mobile sources, air toxics, acid rain control, permits, ozone protection, enforcement and other miscellaneous provisions.

Potential Issues

The following examples highlight RCRA regulations that interface with CAA.

Chlorofluorocarbon (CFC) Reclamation Exclusion — The CAA requires that all ozone depleting emissions from all kinds of refrigeration be reduced to the lowest level possible through recycling, recovery, and other controls. Specifically, Title VI of CAA prohibits venting during servicing and disposal of refrigerants after July 1, 1992. To be consistent with Title VI, and because CFC refrigerants would display the toxicity characteristic under RCRA, used CFC refrigerants from totally enclosed heat transfer equipment, provided the refrigerant is reclaimed for further use — is not subject to regulation as a hazardous waste (§261.4 (b)(12)). Additionally, to qualify for the exclusion, the persons performing the reclamation activities and the equipment they use must be certified under CAA.

This exclusion is only applicable to the actual CFC refrigerant, any oils or other waste removed from the equipment is subject to hazardous waste determination.

Air Emission Control Devices — Air emission control devices located at RCRA hazardous waste facilities but regulated under CAA, can generate residues that may be defined as a hazardous waste. For example, activated carbon units used as air emission control devices of gaseous industrial process emissions will not necessarily be regulated under RCRA. Trapped organics in such columns are not hazardous waste because the gas being treated is not a solid waste (it is an uncontained gas), and therefore any condensed organics do not derive from treatment of a hazardous waste. However, the non gas residues from these devices could be hazardous wastes if they are listed or if they display a characteristic.

Stationary Sources — The CAA of 1990 includes a list of 189 toxic air pollutants of which emissions must be reduced. EPA must publish a list of source categories that emit certain levels of these pollutants. The list of source categories must include:

- "Major sources" - emitting 10 tons per year of a single air toxic, or 25 tons per year of any combination of these toxics
- "Area Sources" - smaller sources emitting less than 10 tons per year of a single air toxic, or 25 tons per year of any combination of these toxics.

Several types of facilities regulated under RCRA Subtitle C may qualify as "major" or "area" sources of toxic air pollutants subject to CAA. Specific small businesses that may be regulated under both programs include dry cleaners, gasoline stations, printers, auto body repair shops, metal finishers, surface coating and painting operations, and solvent degreasing operations.

ATTACHMENT "D"

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
SOLID WASTE AND EMERGENCY
RESPONSE

MAY 13 2011

Mr. Tim Hunt
Senior Director, Air Quality
American Forest and Paper Association
1111 Nineteenth Street, N.W.
Washington, D.C. 20036

Dear Mr. Hunt:

I would like to thank you and other representatives of forest products industries for meeting with my staff on April 26, 2011, to discuss your concerns with the Identification of Non-Hazardous Secondary Materials That Are Solid Waste (NHSM) final rule. We are evaluating a number of the concerns you raised, but wanted to get back to you quickly on the "contained gas" issue that you raised in that meeting and in an issue paper that you forwarded to us on April 13, 2011. We understand that our response to the fourth comment in Part 3b.I.3. of the document *Responses to Comments Document for the Identification of Non-Hazardous Materials that are Solid Waste* (February 2011) has created concerns among the regulated community that the Environmental Protection Agency (EPA) has changed a long-standing interpretation of what constitutes a "contained gaseous material" for purposes of defining the term "solid waste" under the Resource Conservation and Recovery Act (RCRA). We have not changed our prior interpretation but would like to clarify the response.

EPA was responding to a comment requesting that we include in the NHSM final rule a definition of "contained gaseous material." The Agency does not believe that including such a definition in the rule is necessary. However, our response seems to have caused confusion about whether the Agency was changing its prior interpretations regarding the burning of gaseous materials, for example in fume incinerators, and whether or not such burning is considered to be treatment of a solid waste by burning.

The response does not change any previous EPA positions. We clarify here that the Agency's previous statements and interpretations remain effective. Thus, burning of gaseous material, such as in fume incinerators[1] (as well as other combustion units, including air pollution control devices that may combust gaseous material) does not involve treatment or other management of a solid waste (as defined in RCRA section 1004 (27)).

[1] See, for example, 47 FR 27530, June 24, 1982, where it states "Fume incinerators which are used to destroy gaseous emissions from various industrial processes, for example, are not subject to regulation under RCRA.

We also note that since the Agency did not solicit comment on this issue in the proposal, and did not analyze or address it in the preamble to the final rule or in the Regulatory Impact Analysis (RIA) for the rule, it is clear that the Agency did not intend to issue an interpretation that would change previous EPA statements regarding how "contained gaseous material" is interpreted for purposes of RCRA and for purposes of section 129 of the Clean Air Act.

Thank you for your continued interest in protecting the environment. If you have further questions you may contact George Faison, of my staff, at faison.george@epa.gov or 703-305-7652.

Sincerely,

Suzanne Rudzinski

Suzanne Rudzinski, Director
Office of Resource Conservation and Recovery

ATTACHMENT "E"

9489.1994(01)

CLARIFICATION ON THE DISTINCTION BETWEEN THERMAL DESORBERS AND INCINERATORS

United States Environmental Protection Agency
Washington, D.C. 20460
Office of Solid Waste and Emergency Response

February 23, 1994

Mr. David D. Emery
President
Bioremediation Service, Inc.
P.O. Box 2010
Lake Oswego, Oregon 97035-0012

Dear Mr. Emery:

This is in response to your December 21, 1993, letter requesting clarification on the distinction between thermal desorbers and incinerators. In particular, you questioned whether temperature was a criterion for distinguishing between desorbers and incinerators and whether chlordane contaminated soil can be effectively and safely treated by thermal desorption.

Under the Environmental Protection Agency's (EPA's) regulations, thermal treatment units that are enclosed devices using controlled flame combustion and that are neither boilers nor industrial furnaces are classified as incinerators subject to regulation under 40 CFR Part 264, Subpart O. Definitions of boilers, industrial furnaces, and incinerators are established in 40 CFR 260.10. Thermal treatment units that do not use controlled flame combustion and that are not industrial furnaces are classified as "miscellaneous units" subject to regulation under 40 CFR Part 264, Subpart X.

The use of "controlled flame combustion" determines whether EPA regulates a device used for thermal desorption as an incinerator or a "miscellaneous unit". Consequently, a thermal desorber would be subject to regulation as an incinerator if it was equipped with a fired afterburner to destroy desorbed organic compounds, or if the desorption chamber was directly fired, irrespective of how the desorbed organics were controlled. On the other hand, if the desorption chamber was indirectly heated and the desorbed organics were not controlled using controlled flame combustion (e.g., no afterburner), the thermal desorber would be subject to regulation as a "miscellaneous unit". Thus, in response

to your questions, temperature is not a criterion that is used to determine the regulatory status of a thermal desorber.

EPA's regulations for miscellaneous units are not prescriptive given the variety of devices that fall into this category. Rather, the regulations require the permitting official to establish permit conditions that are necessary to protect human health and the environment. For "miscellaneous" thermal treatment units, permit writers will generally require compliance with all of the Subpart O incinerator standards that are appropriate for the technology and then determine if additional controls are needed to ensure that emissions are safe.

Please note that I have described EPA's regulatory classification approach for thermal desorbers. Under the Resource Conservation and Recovery Act, EPA authorizes the States to implement the hazardous waste management regulatory program. State regulations may be more stringent or broader in scope than EPA's. Therefore, you should check with the State in which the facility in question is to be located to identify any applicable standards.

With respect to your question as to whether chlordane contaminated soil can be effectively and safely treated by low temperature desorption, you should contact EPA's technical expert on thermal desorption, Paul de Percin, Office of Research and Development, for assistance. Mr. de Percin can also be consulted about TCDD conjugation but, without full thermodynamic and kinetic data regarding the process involved, it may be difficult to give you any definitive assistance. He can be reached at 513-569-7797.

I hope that this information will be helpful. If you have further questions about the regulatory classification of thermal desorbers, please contact Bob Holloway of my staff at 703-308-8461.

Sincerely,
Michael Shapiro
Director
Office of Solid Waste

cc: Paul de Percin; Bob Holloway

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 Ross Avenue
Dallas, Texas 75202-2733

April 26, 2012

CONFIDENTIAL SETTLEMENT COMMUNICATION

Via e-mail – mreagan@mcginnislaw.com & jdhead@fbhh.com

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Dear Mary & J.D.:

As you know, back on March 15, 2012, EPA informed U.S. Ecology Texas, Inc. (USET) and TD*X Associates, L.P. (TD*X), that it planned to file an administrative complaint alleging, among other things, that USET and TD*X were operating an incinerator without a RCRA permit. Shortly thereafter, officials from USET and/or TD*X contacted EPA management, asking that parties engage in pre-filing negotiations in an attempt to settle this case without filing an administrative complaint. EPA agreed to this request. We subsequently met on April 11, 2012, where USET and TD*X presented two alternatives which they hoped would allow the operation of the thermal desorption unit (TDU) without a RCRA permit, or alternatively, with a Subpart X permit.

We have reviewed your proposed alternatives to either classify the TDU as a distillation unit, or to install a carbon absorber prior to the combustion chamber. Neither of these proposals would allow operation of the TDU without a RCRA Subpart O permit. We don't agree that the TDU is a distillation unit because the listed hazardous waste streams that USET would be able to take from the petroleum refining industry are primarily solids or sludges containing liquids. While we agree that USET and TD*X is heating these solids and sludges to vaporize and reclaim any liquids they contain, when commonly discussing distillation, the term is used in reference to heating liquids for the purpose of separating those liquids into different liquid fractions. Also, the installation of a carbon absorber would just be another treatment step prior to the treatment of the hazardous waste in the combustion chamber. Therefore, the only option left without a reconfiguration is a RCRA Subpart O permit.

Throughout these negotiations, we have consistently held that the TDU must be regulated under Subpart O. EPA has stated that "heating waste to a gaseous state is subject to regulation under RCRA as treatment of hazardous waste" and "thermal treatment after a material becomes a hazardous waste is fully regulated under RCRA." 54 Fed. Reg. 50968, 50973 (December 11, 1989). These statements were in the same Federal Register as EPA's statement that it does not have the authority to regulate gaseous process emissions. Since we are not dealing with gaseous process emissions,[1] your reliance on memos related to fume incinerators (and similar memos) is misplaced.

Similarly, in an August 11, 1992 EPA memo,[2] Giant Cement had argued that "off-gases from the resource recovery kilns fed to the cement kiln cannot be classified as a hazardous waste." EPA rejected this contention stating that "we agree with the Regions' interpretation that this distinction is irrelevant when determining our regulatory authority over the gases. Off-gases from the resource recovery kilns are regulated under RCRA since they originate from treatment of hazardous waste."

Furthermore, it is clear that since waste destruction occurs in the combustion chamber of the TDU, the unit would be regulated as an incinerator. In the preamble to proposed recycling regulations, EPA has stated that:

> we wish to clarify that materials being burned in incinerators or other thermal treatment devices, other than boilers and industrial furnaces are considered to be "abandoned by being burned or incinerated" under § 261.2(e)(1)(ii) whether or not energy recover occurs . . . In our view, any such burning (other than in boilers or industrial furnaces) is waste destruction subject to regulation under either Subpart O of Part 264 or Subpart O and P of Part 265. If energy or material recovery occurs, it is ancillary to the purpose of the unit - to destroy hazardous waste by means of thermal treatment – and so does not alter the regulatory status of the device or the activity. Thus, a hazardous waste incinerator burning chlorinated hydrocarbon wastes and recovering hydrochloric acid remains a Part 264 incinerator and the chlorinated hydrocarbon wastes are being incinerated, not recycled.

48 Fed. Reg. 14472, 14484 (April 4, 1983). Furthermore, specifically dealing with a thermal desorber, EPA has stated that a "thermal desorber would be subject to regulation as an incinerator if it was equipped with a fired afterburner to destroy desorbed organic compounds. . . ."[3] The uncondensed gases are burned in the TDU's combustion chamber by

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[1] By gaseous process emissions, we mean materials that are in the gaseous state at the point of generation (e.g., where it leaves the manufacturing process unit). This is the point that you would make a hazardous waste determination. In this case, USET and TD*X are treating materials which are already hazardous waste.

[2] RO 11684.

[3] RO 13657.

controlled flame combustion. Thus, the combustion chamber is acting like an afterburner, and therefore it meets the definition of an incinerator and must be regulated under Subpart O. In addition, the Court's decision in *Rineco* also supports regulation of the TDU. In *Rineco,* uncondensed gases from the Thermal Metal Washing Unit were sent to a thermal oxidizer. The Court found that this constituted thermal treatment, and thus granted summary judgment for the United States.[4] Finally, the correspondence between EPA and the Arkansas Department of Environmental Quality you cited in USET's April 17, 2012 letter is not contrary to EPA's position in this case. The case against Rineco involved two major pieces of equipment, a thermal metals washing unit and a thermal oxidizer operating in series. In this case, we have one unit, a thermal desorber, which also burns hazardous waste in its combustion chamber, which results in the TDU being classified as an incinerator, and not a miscellaneous unit.

Other arguments you have advanced can also be distinguished. You have referenced a statement from the *Hazardous Waste TSDF – Technical Guidance Document for RCRA Air Emission Standards for Process Vents and Equipment Leaks*, EPA-450/3-89-021 (July 1990) that states "the process vent stream (i.e., gases and vapors) from a hazardous waste management unit would not be classified as a hazardous waste. Noncontainerized gases emitted from hazardous wastes are not themselves hazardous waste because the RCRA statute implicitly excludes them." *Id.* at 2 – 3. This is referring to emissions directly to the atmosphere from hazardous waste in tanks or similar equipment.[5] For example, if you had an open-top tank containing hazardous waste, the emissions to the atmosphere from that tank would not have to be controlled under Subpart AA. An example of this is found in Figure 5-1 of the Guidance. Subsequently, Subpart CC was promulgated to address air emissions from tanks subject to the Subpart CC requirements. Thus, this argument also fails because we are not dealing with emissions directly to the atmosphere.[6]

Finally, your reliance on the May 13, 2011 letter from Suzanne Rudzinski to Tim Hunt can easily be distinguished. The letter states that the Agency's prior response does not change any previous EPA positions. Thus, past EPA pronouncements such as those regarding gaseous *process* emissions and emissions directly to the atmosphere have not been changed. Likewise, past EPA pronouncements that "heating waste to a gaseous state is subject to regulation under RCRA" and thermal treatment after a waste becomes a hazardous waste if fully regulated under RCRA" are also still valid. The single sentence in the letter regarding the burning of gaseous materials cannot be interpreted to overrule EPA's previous statements regarding thermal treatment of hazardous waste.

Given EPA's position that a Subpart O permit is required, and USET and TD*X's reluctance to obtain a Subpart O permit, the question that remains is whether USET and TD*X

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[4] *United States v. Rineco Chemical Industries, Inc.*, 2009 WL 801608 (E.D. Ark.).

[5] "The process vent standards apply to vents emitting organic liquids, gases, or fumes *that are released by mechanical or process-related means* from hazardous waste [meeting certain criteria]." *Id.* at 5-1 (emphasis added).

[6] Arguments relating to landfill gases would fail for the same reason.

are willing to negotiate a consent agreement and final order (CAFO) with such an outcome. We have not received such assurances since EPA agreed to conduct pre-filing negotiations. I have attached a CAFO which sets forth the terms that EPA believes are necessary to settle this case in accordance with RCRA. Please review this CAFO and let us know in writing no later than Monday, May 7, 2012, whether you are willing to negotiate in good faith a CAFO which would require the parties to obtain a RCRA Subpart O permit for the TDU. If we do not receive such assurances, then obviously there is no reason to waste everyone's time on further negotiations. If one party is willing and the other is not, the question that then needs to be asked whether that one party would be able to meet the requirements of the CAFO without the other party.

Obviously, there are a number of factors that you would have to consider. We would like you consider the following. First, the only substantive difference between a RCRA Subpart O and a Subpart X permit would be that a Subpart O permit would require that you obtain a Clean Air Act Title V permit. Given that a Title V permit imposes no new substantive requirements, there would be very little difference in how the parties would operate the oil reclamation unit other than some reporting and recordkeeping requirements. Second, assuming that EPA is successful in convincing an ALJ that a Subpart O permit is required, would the relief that is rewarded be flexible enough to address changing circumstances (such as delays in the permitting process)? I seriously doubt that the relief awarded would include provisions such as dispute resolution and force majeure. You would be better able to negotiate the timing of the submittals with EPA, as opposed to a judge potentially splitting the difference or siding with EPA's proposed deadline. Furthermore, you have argued that the issuance of an administrative complaint would result in the oil reclamation unit being put out of business. If this statement is true, then logic dictates that the best course of action would be to negotiate a CAFO that would allow the TDU to operate until a RCRA permit decision is made.

A. Compliance Order

The enclosed draft CAFO sets forth a compliance order that allows operation of the TDU under certain conditions pending the processing of the RCRA permit and related activities. There are four major parts of this Compliance Order:

1. Interim Operating Requirements – These requirement include restrictions on feedstock, interim operating parameters, installation and operation of certain equipment required by 40 C.F.R. Part 63, Subpart EEE, and reporting requirements.

2. RCRA Permit Modification – This section requires the submission of a Class 3 RCRA Permit Modification to permit the TDU as a Subpart O Incinerator. The permit modification is also required to include the requirements of 40 C.F.R. Part 63, Subparts A and EEE.

3. Subpart EEE Requirements – The Subpart EEE requirements are broken down into three parts: Section C - Notice of Intent to Comply (NIC)/Public Participation, Section D – Startup, Shutdown, and Malfunction Plan, and Section E – Comprehensive Performance Test (CPT). The CPT will also include a performance test to determine the efficiency and operating

parameters of the condensers. Please note that you will need to obtain a Clean Air Act Title V permit because of the applicability of Subpart EEE, even if you are not a major source. 40 C.F.R. § 63.1200(a).

4. Risk Burn – This provision requires the performance of a risk burn. This will be used for the site-specific risk assessment, which will be submitted to determine whether risk-based terms and conditions are need to be added to the permit to protect human health and the environment. We believe that a risk assessment is necessary because of the expected high public interest in this permit modification, the proximity of residences to the facility, and the almost four years of operation without a RCRA permit.

As we told you at our last meeting, a copy of the Compliance Order portion of the CAFO is being sent to TCEQ for their review. We will be working with them to refine this portion of the CAFO, if needed.

B. Time Frame

In order for a CAFO to be a final order, it must have a date certain that the parties are in compliance. Therefore, we cannot have an open-ended CAFO. At some point, the parties must have received a RCRA permit or hazardous waste activities must be terminated. A timeline with the deadlines from the CAFO and estimated review time is attached as Enclosure A.

C. Violations

Because we have not spent a lot of time specifically discussing the violations, I have provided a brief explanation of each violation below.

Count One – Processing[7] Hazardous Waste without a Permit. I mentioned this count to Mary, but I don't believe I mentioned it to J.D. USET and TD*X processed (treated) hazardous waste that was not "oil-bearing hazardous waste from petroleum refining, production, or transportation practices" (petroleum industry waste) such as waste from chemical plants.[8] As such, the recycling exemption in 40 C.F.R. § 261.6(a)(3)(iv)(C) would not apply. Therefore, the processing (treatment) of non-petroleum industry hazardous waste in the tanks in the oil reclamation unit would constitute processing hazardous waste without a permit.

Count Two – Processing Hazardous Waste without a Permit. This Count applies to the shipments of non-petroleum industry waste that were fed into the TDU. The separation of organic contaminants from the hazardous waste in the rotary constitutes processing (treatment). Since the recycling exemption in 40 C.F.R. § 261.6(a)(3)(iv)(C) does not extend to non-petroleum industry waste, USET and TD*X processed hazardous waste in the TDU without a permit. Since treatment took place in the rotary dryer, this violation is unrelated to the burning

[7] Texas uses the term "processing" in place of "treatment". 30 T.A.C. § 335.1(117).

[8] Examples of non-petroleum industry waste are given in Section D of this letter.

of the noncondensed gases in the combustion chamber of the TDU. No penalty is assessed for this violation, since it is be covered by Count 3.

Count Three – Processing Hazardous Waste without a Permit. This violation involves the burning of the noncondensable gases in the combustion chamber of the TDU from all of the hazardous waste fed into the TDU, irrespective of whether the feedstock was petroleum industry waste.

Count Four – Storage of Hazardous Waste without a Permit. This violation covers the roll-off boxes of hazardous waste stored in the area of the facility called the "Y" from March 9, 2010 through June 11, 2010. In USET's June 29, 2011 letter, USET claimed the following:

> The use of the "Y" was to stage "in-process" waste that had entered, but not completed, the oil reclamation process. For example, initial separation of liquids from oil sludge may have been completed on a waste stream upon arrival at the facility. Subsequently, the sludge may have been placed at the "Y" awaiting further processing in the TDU. Since the waste had entered a reclamation process that is not regulated under parts 262 through 266, the requirements under 40 C.F.R. § 262.34, referenced by EPA as their concern, would not apply to these containers.

June 29, 2011 letter at 4 – 5.

However, storage of hazardous waste prior to recycling is regulated. 40 C.F.R. § 261.6(c)(1). One cannot claim that a waste is "in process" when it started recycling process (e.g., initial separation of liquids from oily sludge), then place the sludge in a roll-off box elsewhere for over a month (storage), and then return it to the TDU to be processed. Once the waste left the oil reclamation process, it was required to be stored in a permitted storage area.

D. Penalty Calculations

We have calculated a proposed penalty of $1,385,457. Counts 1 – 3 – ($1,212,027) apply to both USET and TD*X, to be split between the two parties as they see fit. Count 4 ($173,430) only applies to USET.

Count 1 – $ 343,710
Count 2 – Included in Count 3
Count 3 – $ 868,317
Count 4 – $ 173,430

Total $1,385,457

I have enclosed a copy of the penalty calculation worksheets, the 2003 RCRA Civil Penalty Policy, and the Adjusted Penalty Matrices.

We did not make any upfront adjustments to the penalty. We could have increased the penalty calculations for willfulness/negligence because of the non-petroleum industry wastes that were used as feedstock. It is clear that such wastes as chemical plant wastes would not be considered as petroleum industry wastes. *See* 40 C.F.R. § 261.4(a)(12)(ii).[9] For example, the following are a few examples of hazardous waste used as feedstock in the TDU that did not qualify as petroleum industry wastes:

A. 126 shipments of hazardous process wastewater (D001, D002, F003, and F005) (Hazardous Waste Tank Water Tank 7906/Tank 7907) from Champion Technologies;[10]

B. Nineteen (19) shipments from cleanout of a phenol tank - K022 waste (distillation bottom tars from the production of phenol/acetone from cumene) from Shell Chemical Company;[11]

C. Two shipments of toluene contaminated soil from a toluene spill (U220) from Kinder Morgan; [12] and

D. Two shipments from Rineco of clean up wastes (polystyrene and gasoline) at an airport.[13]

Clearly, none of these on their face come close to being an "oil-bearing hazardous waste from petroleum refining, production, or transportation practices". USET and TD*X clearly profited from treating waste that it was not authorized to take. Therefore, EPA could have easily increased the penalty for willfulness/negligence. Likewise, we could have increased the penalties for history of noncompliance, given the 2009 and 2010 Agreed Orders with TCEQ, but chose not to. If this case goes to hearing, EPA reserves the right to include these adjustments, but also any others it feels is appropriate. EPA also reserves the right to include additional violations that are not cited here.

As to the economic benefit component in Count Three, we used the BEN model, which is a free download available on EPA's website at http://www.epa.gov/compliance/civil/econmodels/. The economic benefit was calculated to be $73,757. This is a delayed cost, since the parties will conduct the appropriate testing and pay the applicable permit fees. If for some reason testing and a permit is not needed, the economic benefit would be an avoided cost,

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[9] *See also* 50 Fed. Reg. 41964, 49169 (November 25, 1985) (by petroleum refining facility, EPA means the facilities that meet the definition of the Petroleum Refining Standard Industrial Classification (SIC) 2911).

[10] Wastestream No. 90068399.

[11] Wastestream No. 90063611.

[12] Wastestream No. 90071037.

[13] Wastestream No. 90070520.

or $296,306. The inputs for the economic benefit were $4,000 for permitting fees paid to TCEQ, $10,923 for permitting an additional unit (25% of the general facility requirements permitting costs), and $326,584 for testing, for a total of $341,507. These figures came from tables in the 1997 Document entitled "Estimating Costs for Economic Benefit of RCRA Noncompliance" (copy enclosed). We used the typical cost estimate for these activities, as opposed to a lower figure or higher figure. This number ($341,507) was inputted as a one-time, nondepreciable expenditure. The cost estimate date was April 16, 2012, June 15, 2008 was used as the noncompliance date, and the penalty due date was June 1, 2012. The BEN calculations for both the delayed cost and avoided cost estimates are included as part of the penalty calculation worksheets. Finally, I have enclosed an electronic copy of 40 C.F.R. Part 22, which governs the terms and conditions of the CAFO.

If you have any questions, please feel free to call me at (214) 665-8074.

Sincerely,

Evan L. Pearson

Evan L. Pearson
Senior Enforcement Counsel

Enclosures

- CAFO Time Line
- Draft CAFO
- Draft Penalty Calculations
- RCRA Civil Penalty Policy
- Adjusted Penalty Matrices
- TCEQ Permitting Fees
- Estimating Costs for Economic Benefit of RCRA Noncompliance
- 40 C.F.R. Part 22

CONFIDENTIAL SETTLEMENT COMMUNICATION

ENCLOSURE A

CAFO TIME LINE WITH DEADLINES AND ESTIMATED APPROVAL TIME

Items 1 – 4, 6, 10 are calculated from the effective date of the CAFO

1. **Immediately**

   Waste feedstock limitations - ¶ 68.A.1

2. **Within 7 days**

   a. Submit operating parameters for TDU - ¶ 68.A.3
   b. Submit draft Notice of Intent to Comply and Initial Notification - ¶ 68.C.1

3. **Within 90 days (3 months)**

   a. Install/monitor/operate automatic hazardous waste feed cutoff - ¶ 68.A.4
   b. Install /monitor/operate continuous emissions monitors - ¶ 68.A.5
   d. Submit Class 3 RCRA permit modification - ¶ 68.B.1

4. **Within 120 days (4 months)**

   a. Submit Feedstream Analysis Plan - ¶ 68.A.6
   b. Submit Startup, Shutdown, and Malfunction Plan - ¶ 68.D.1
   c. Submit Comprehensive Performance Test Plan - ¶ 68.E.2
   d. Submit Continuous Monitoring System Performance Test Plan - ¶ 68.E.2
   e. Submit Risk Burn Plan - ¶ 68.F.1

5. **Within 60 days after Public Meeting**

   Submit Final NIC - ¶ 68.C.5

6. **Within 1 year (12 months)**

   Obtain Approval of CPT and Risk Burn Plans

7. **Within 90 days after approval of CPT and Risk Burn Plans**

   Complete CPT and Risk Burn - ¶¶ 68.E.5 and 68.F.3

8. **Within 90 days after completion of CPT test**

   Submit Notification of Compliance - ¶ 68.E.8

9. **Within 120 days after Risk Burn**

   Submit Risk Burn Certification and Risk Assessment Report - ¶ 68.F.7

10. No later than 2 ½ years (30 months)

RCRA Permit Decision - ¶ 68.B.5

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CONFIDENTIAL SETTLEMENT COMMUNICATION

May 14, 2012

VIA E-MAIL

Evan L. Pearson
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Re: U.S. Ecology Texas, Inc.
TD*X Associates, L.P.

Dear Evan:

This letter provides the joint response of U.S. Ecology Texas, Inc. ("USET") and TD*X Associates, L.P. ("TD*X") to your letter dated April 26, 2012, transmitting a draft consent agreement and final order ("CAFO") for our review. Among other items, the draft CAFO would require USET and TD*X to obtain a RCRA incinerator permit for the thermal desorption unit ("TDU") used to recycle and reclaim certain oil-bearing hazardous waste at USET's Robstown, Texas facility. In your letter you requested that USET and TD*X notify EPA in writing by May 7, 2012, whether we are willing to enter into good faith negotiations with EPA for a CAFO requiring USET and TD*X to obtain a Subpart O permit for this unit. On May 1, 2012, EPA extended this deadline to May 14, 2012, to allow the parties additional time to determine their respective positions on the draft CAFO and to confer with the permitting agency TCEQ, which would have responsibility for technical review and issuance of any permit required by the CAFO. On May 10, 2012, you clarified that this deadline was not intended to prevent USET and TD*X from presenting other reconfiguration options that would not require coverage under a Subpart O permit. We are encouraged that your clarification signals the possibility that the adverse consequences discussed at the end of this letter are avoidable.

In your April 26, 2012 letter you state that EPA has not received any assurances from USET and TD*X of our willingness to negotiate a CAFO which includes a requirement to obtain a Subpart O permit for the TDU. It is our understanding, however, that EPA agreed to withhold filing of a complaint to allow all parties, including EPA, to actively explore various alternative

regulatory options for the TDU not limited to a Subpart O permit. In fact, at our last meeting on April 11, 2012, EPA expressed, what we viewed as, a sincere and genuine interest in reviewing the unit's potential status as a distillation unit under RCRA Subpart AA or alternatively, whether retrofitting the unit with carbon adsorption would avoid RCRA permitting. It was not until we received your April 26, 2012 letter that we learned that EPA had rejected both of these approaches and instead would require a Subpart O permit.

In stating this conclusion, you described a RCRA Subpart O permit as "the only option left without a reconfiguration." In addition, your April 26th letter contains new additional detail concerning EPA's position, including an analysis of the *Rineco* precedent and EPA's decision to regulate Rineco's operations under Subpart X relating to miscellaneous units, rather than Subpart O. You distinguish our case from Rineco's on grounds that "[t]he case against Rineco involved two major pieces of equipment, a thermal washing unit and a thermal oxidizer operating in a series" whereas this case involves a single unit which you contend burns hazardous waste in its combustion chamber. This letter provided important new information compelling USET and TD*X to re-assess reconfiguration options that allow operation of the TDU in series with thermal oxidation.

While we believe that neither the TDU nor its combustion chamber is an incinerator requiring such reconfiguration; nevertheless, USET and TD*X are willing to negotiate in good faith a CAFO that allows the redirection, after condensation, of the non-condensable vent gases to a separate thermal oxidizer. This design change would result in two separate units operating in series similar to Rineco's design and configuration. As with Rineco, this will allow the reconfigured TDU to be permitted under applicable Subpart X regulations. Based on the information and technical rationale provided in your letter, this reconfiguration offers an option consistent with this recent EPA determination. USET and TD*X have proposed this option in an effort to expedite resolution of the technical issues related to this case, since you provided a distinction in your April 26th letter of an acceptable Subpart X configuration.

As part of our re-assessment of technical options, USET and TD*X met with the TCEQ on May 8, 2012, to discuss the draft CAFO and potential reconfiguration alternatives that EPA may not consider applicable to Subpart O requirements. TCEQ representatives present at the meeting included their chief technical experts in hazardous waste combustion. As you are aware, the TCEQ is authorized by EPA to administer its own hazardous program under RCRA *in lieu of* the federal program, and, consequently, has exclusive permitting jurisdiction. Therefore, their involvement and input in these negotiations is vital. During the May 8, 2012 meeting TCEQ expressed to USET a technical disagreement with EPA's conclusions that the TDU is an incinerator under Subpart O and stated that USET and TD*X could so inform EPA. TCEQ recommended a joint meeting with EPA, USET, and TD*X in an effort to reach a cooperative resolution of the permitting issues raised by EPA. It is our understanding that following our May 8, 2012 meeting, TCEQ initiated discussions with EPA in further efforts to communicate its concerns to EPA and determine the proper regulatory approach.

We fully appreciate EPA's interest in expediting this case, and, in fact, we share this goal. Beginning in December 2010, and again in April 2011, USET met with EPA in an effort to seek a prompt resolution of this enforcement case. These efforts were combined with those of TD*X in February of this year and continued in consecutive meetings between EPA and the two companies in March and April, 2012. But settlement of this matter must not only be timely but technically sound. USET and TD*X firmly believe that both objectives can be accomplished with the continued persistence and cooperation of all parties, including the TCEQ.

Much is at stake if EPA declines this opportunity to pursue settlement at this juncture. As the moving party, EPA must weigh its litigation risk in being able to successfully prove its allegations in an administrative proceeding. In addition, there are obvious problems with EPA's crafting of an order containing conclusions with which the implementing agency, TCEQ, has strong technical disagreement. Beyond the legal ramifications, however, other matters loom. As we have stated repeatedly, EPA's unilateral filing of a complaint will necessarily result in the complete and immediate shutdown of oil reclamation operations at the facility. This means the loss of an important waste management alternative for the reclamation of appropriate oil-bearing waste and after testing, the re-introduction of this oil as a commodity into the marketplace. Texas industry relies on this service and will be adversely affected. Wastes formerly sent to the facility for reclamation will be displaced and likely sent elsewhere for destruction, rather than for beneficial re-use. The formerly reclaimed oil will no longer be produced to supplement the nation's energy requirements. Most regretful of all is the effect that EPA's actions would have on the lives of persons employed at the facility and their families. Combined, USET and TD*X employ approximately 50 persons supporting the facility's oil reclamation operations, many of whom are minorities. As a result of EPA's filing of a complaint, these employees will lose their jobs. We urge EPA to consider its next step in the context of these broader considerations and commit to further pre-complaint settlement negotiations and remain open to viable technical solutions that will resolve this matter.

We agree with TCEQ and reiterate its request for a meeting of all the parties. We believe we can work through and refine the details of the alternative presented above and reach a settlement that meets EPA's objectives, is acceptable to the TCEQ, and allows the continued operation of the business.

We believe the above proposal satisfies the reconfiguration option outlined in your recent communications. Please notify us immediately if such is not the case.

Sincerely,

McGinnis, Lochridge & Kilgore, L.L.P.

Mary Reagan
Representing U.S. Ecology Texas, Inc.

Fritz, Byrne, Head & Harrison, P.L.L.C.

Bob Renbarger,
Representing TD*X Associates, L.P.

MBR/rrh

cc: Zak Covar, Executive Director, TCEQ
Sam Coleman, Acting Regional Administrator, EPA
Steve Gilrein, EPA
Mark Potts, EPA
Earl Lott, TCEQ
Guy Tidmore, EPA

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April 17, 2012

VIA E-MAIL

Evan L. Pearson
Senior Enforcement Counsel (6RC-ER)
RCRA Enforcement Branch
Office of Regional Counsel
U. S. Environmental Protection Agency, Region 6
1445 Ross Avenue
Dallas, TX 75202-2733

Re: U.S. Ecology, Inc.
TD*X Associates

Dear Evan:

During the April 11, 2012 meeting EPA expressed it did not understand its conclusion related to the Rineco case and was unable to provide an explanation of how EPA concluded that Subpart X permitting was appropriate for Rineco's TMW unit. Additionally, EPA reiterated its need to be consistent in its determinations and that the conclusions EPA has established in U.S. Ecology's case are consistent with prior decisions. These comments appear contrary to each other and concern our team greatly on the reliance of the Rineco decision in our case and need for consistent application of EPA's interpretations.

We have provided below our analysis of the correspondence provided by EPA to the State of Arkansas stating its justification and conclusions that a Subpart X permit rather than a Subpart O permit was required. This clarification and understanding is imperative to ensure the application of these standards is consistent.

The July 12, 2010 letter from EPA to Thomas Rheaume at the Arkansas Department of Environmental Quality provides a process description that omits the condensing system between the thermal desorber and the Thermal oxidizer. As a result EPA concluded,

> the TOU is considered an *afterburner chamber* for the combustion process initiated in the TMWU. Subsequently, the two process units **together** (i.e., the TMWU followed by the TOU) are classified as an incinerator (emphasis added).

The letter offers two EPA interpretive memos to support its position, neither of which contemplates the applicability of these standards to RCRA exempt recycling units.

The January 4, 2011 letter from EPA to Mike Bates at Arkansas Department of Environmental Quality clarifies and provides a correction to that interpretation. The letter states that EPA did not consider the condensing system in the July 12, 2010 determination and stated that the condensing system changes the conclusions of the applicability of the incinerator standards. This one process difference resulted in EPA changing its conclusion that the units are "better classified as miscellaneous units under RCRA" and that "the two units are **not** 'hazardous waste combustors' as defined in 40 CFR §63.1201 (emphasis added)."

The interpretive memos provided by EPA support that the incineration standards are applicable if the thermal desorption unit is followed by an afterburner. EPA's conclusion clearly draws a distinction that the recovery of vapors in Rineco's primary and secondary condensers establishes that the thermal oxidizer is not acting as an afterburner, as originally referenced in EPA's July 12, 2010 letter. Therefore, the conclusion of Subpart X – Miscellaneous Unit applicability is based solely on the treatment activity that is occurring in the Thermal Metals Wash (TMW) Unit.

Like Rineco, the thermal desorption process at U.S. Ecology involves the condensation of gases immediately following the TDU. At U.S. Ecology, the **entire gas stream** is passed through condensers and the non-condensable fraction routed back into the TDU. A slip stream of non-condensable gases is routed through a process vent to the combustion chamber to maintain a pressure balance within the system. Thus, at a minimum, the combustion chamber does not qualify as an incinerator based on the analysis in EPA's January 4, 2011 applicability determination letter.

More importantly, however the TDU processes material specifically defined under RCRA's reclaimed oil exemption. Rineco's TMW, which was determined to be for material destruction, is distinguished from TD*X's TDU, which is for exempt material reclamation. Thus, establishing a consistent evaluation would recognize this distinction and conclude that TD*X's system is neither a hazardous waste combustor nor a Subpart X unit; rather, it is exempt from these requirements in §261.6(b), which provides that recyclable materials including reclaimed oil are not subject to regulation under Part 264, including Subparts O and X, relating to incinerators and miscellaneous units, respectively. Section 261.6(c)(1) further provides that the recycling process is exempt from regulation.

While generally exempting these recycling operations from regulation, §261.6 requires compliance with 40 CFR Parts 264 and 265, Subparts AA and BB, as applicable, for recycling units located at permitted hazardous waste management facilities. As we discussed at our April 11, 2012 meeting, regulation of the oil reclamation process as a distillation operation under Subpart AA is an appropriate mechanism under RCRA to address EPA's concerns about any air emissions associated with the combustion chamber's process vent. Using this approach not only addresses EPA's specific process vent concern but also ensures programmatic consistency highlighted by EPA at our meeting as a key objective.

Sincerely,

Mary Reagan

MBR/rrh

cc: Mark Hansen, EPA
Earl Lott, TCEQ
Simon Bell, USET
Andrew Marshall, USET
J.D. Head
(via e-mail)

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June 28, 2012

Evan Pearson
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Office of Regional Counsel
U.S. Environmental Protection Agency, Region 6
1445 Ross Avenue
Dallas, TX 75202-2733

Subject: U.S. Ecology Texas, Inc. (USET)
TD*X Associates, L.P. (TD*X)

Dear Evan:

This letter follows up on settlement meetings held on June 21 and 22, 2012, between EPA and the above-referenced parties by providing additional information concerning compliance status under certain provisions of Section IV.C. of the revised draft consent agreement and final order (CAFO). Specifically, Section IV.C. of the draft CAFO would require the Respondents USET and TD*X to install, operate and maintain a fixed roof and closed-vent system that routes all organic vapors from certain tanks to a control device pursuant to 40 CFR Section 61.343(a)(1). TD*X currently maintains a fixed roof and closed-vent system from the following tanks set forth below to a control device:

1. Shaker Tank (T-30)
2. Surge Tank (T-34)
3. Condensate Water Tanks (T-3A, T3-B)
4. T-10 Series Tanks (T-10, T-11, T-12, T-13)
5. T-30 Series Tanks (T-31, T-32, T-33)
6. Filtrate Mix Tank (T-5)
7. Filtrate Tank (T-6)
8. Filtrate Skim Tank (T-6A); and
9. Centrifuge

USET and TD*X have visually inspected the above-referenced tanks and verified that these tanks are currently maintained and operated with a fixed roof and closed vent system that routes all organic vapors from these tanks to a control device in compliance with 40 CFR Section 61.343(a)(1). Documentation of the inspection is attached to this letter.

In addition, the revised draft CAFO would require the Respondents to install, calibrate, maintain, and operate according to manufaeturer's specifications, devices to continuously monitor the control device operation required by 40 CFR Section 61.349. USET and TD*X have verified that TD*X currently

calibrates, maintains, and operates according to manufacturer's specifications, devices to continuously monitor the control device operation required by 40 CFR Section 61.349. The attached visual inspections have confirmed that two thermocouples (TE18 and TE19) are currently installed in the furnace chamber and integrated in a programmable logic controller (PLC) data logging system which allows for continuous monitoring and recording.

Sincerely,

Andrew Marshall, PE
Environmental Director

U S E C O L O G Y , I N C .

M E M O R A N D U M

DATE: August 26, 2012

TO: Andrew Marshall

FROM: Celina Camarena

RE: **YOUR CALL FROM 6-26-12: FIXED-ROOF TANKS & CLOSED VENT SYSTEM VERIFICATION**

The purpose of this memo is to verify the following as requested (TDX CAFO-SECTION C-ADDITIONAL REQUIREMENTS-E):

- TD*X currently maintains a fixed roof and closed-vent system that routes all organic vapors from the following tanks set forth below to a control device:
  - Shaker Tank (T-30);
  - Surge Tank (T-34);
  - Condensate Water Tanks (T-3A, T3-B);
  - T-10 Series Tanks (T-10, T-11, T-12, T-13);
  - T-30 Series Tanks (T-31, T-32, T-33);
  - Filtrate Mix Tank (T-5);
  - Filtrate Tank (T-6);
  - Filtrate Skim Tank (T-6A); and
  - Centrifuge.

As requested, we (Celina Camarena-USET Environmental Engineer and Jose Salazar-TD*X Engineer) have visually inspected the tanks mentioned above for verification. Based on our inspection, we have confirmed that these tanks are currently maintained and operated with a fixed roof and closed vent system that routes all organic vapors from these tanks to a control device.

U S E C O L O G Y , I N C .

M E M O R A N D U M

DATE: August 26, 2012

TO: Andrew Marshall

FROM: Celina Camarena

RE: **YOUR CALL FROM 6-26-12: VERIFICATION OF CONTINUOUSLY MONITORING DEVICES**

The purpose of this memo is to verify the following as requested (TDX CAFO-Section C-ADDITIONAL REQUIREMENTS-F):

- As pursuant to 40 C.F.R. §61.354 (c), TD*X currently calibrates, maintains, and operates according to manufacturer's specifications, devices to continuously monitor the control devices operations required by 40 C.F.R. §61.349.

As requested, we (Celina Camarena-USET Environmental Engineer and Jose Salazar-TD*X Engineer) have verified, as pursuant to 40 C.F.R. §61.354 (c), that TD*X currently calibrates, maintains, and operates according to manufacturer's specifications, devices to continuously monitor the control devices operations required by 40 C.F.R. §61.349. Visual inspections confirmed that two thermocouples (TE18 & TE19) are currently installed in the furnace chamber and integrated in a programmable logic controller (PLC) data logging system which allows for continuous monitoring and recording.